TABLE 3.4 Aquifer and Well Characteristics in Colorado
Well characteristics
Aquifer name and description
Depth (ft)
Common range
May exceed
Yield (gal/min)
Common May range exceed
Remarks
Principal Aquifers
Unconsolidated sedimentary rock aquifers: South Platte alluvial aquifer:
30 - 150 250
Interbedded gravel, sand, silt, and clay; contains some cobbles and boulders; unconsolidated. Generally unconfined.
Arkansas alluvial aquifer: 25 -100 200
Boulders, cobbles, gravel, sand, and clay. Generally grades from fine sand near the surface to coarse sand and gravel at the base. Generally unconfined.
High Plains aquifer: Gravel, 200-400 450
sand, silt, and clay; contains some caliche. Poorly to moderately consolidated. Generally unconfined.
100-1,500 3,000
100-1,200 1,500
350-2,000 2,500
Provides water for public supplies and supplemental irrigation. Transmissivity ranges from 2,000 to 200,000 ftVd. Dissolved-solids concentration ranges from 100 mg/L in areas overlain by dune sand to about 4,000 mg/L in some downstream areas. Water hard to extremely hard. Local areas show significant water-level declines.
Principal source of water for irrigation, public supply, and industrial wells. Transmissivity ranges from 1,000 to 150,000 ftVd. Dissolved-solids concentration ranges from about 800 to 5,000 mg/L. Water hard to extremely hard.
Primary source for irrigation, public supply, and domestic use. Transmissivity ranges from 3,000 to 30,000 ftVd. Dissolved-solids concentration generally ranges from 200 to 500 mg/L. Widespread water-level declines affecting well production and increasing irrigation costs.